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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,916	03/01/2002	Otto Preiss	004501-643	7132

7590 07/26/2004

Robert S. Swecker  
BURNS, DOANE, SWECKER & MATHIS, L.L.P.  
P.O. Box 1404  
Alexandria, VA 22313-1404

EXAMINER

LU, KUEN S

ART UNIT	PAPER NUMBER
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2177

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/084,916

Applicant(s)

PREISS ET AL.

Examiner

Kuen S Lu

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/3/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use. The specification of the disclosure is objected to because it fails to comply with the "Arrangement of the Specification". Correction is required.

### ***Arrangement of the Specification***

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The following guidelines illustrate the content of the specification of a utility application. These guidelines are suggested for the applicant's use.

### ***Content of Specification***

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data

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sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.

(b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.

(c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.

(d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

(e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

(1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

(2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

(f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

(g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

(h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

(i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural

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indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

(j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

(k) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

### **Abstract**

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the Abstract includes the term "invention" in the first sentence. The term can be implied and should be avoided.

Correction is required. See MPEP § 608.01(b).

### **Claim Objections**

4. Claims 7 and 10-13 are objected to under 37 CFR 1.75(c) as being in improper form because of dependent on one of multiple dependent claims while each claim also serves as one of the multiple claims upon which claims are dependent. For example, claim 7 is dependent on one of claims 1 to 6 while claim 8 is dependent on one of

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claims 1 to 7. See MPEP § 608.01(n). For compact prosecution, the Examiner interprets each of them as a singularly dependent claim and dependent on claim 1.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 7-8 and 11-18 are rejected under U.S.C. 102(b) as anticipated by Maki et al. (U.S. Patent 5,201,047, hereafter "Maki").

As per claim 1, Maki teaches the following:

"A data organization system having at least one data classification structure for describing a classification system" at col. 2, lines 31-41, by describing an attribute-based item classification system for classification query and retrieval, and further, "user-definable classification elements which have a user-definable relationship with one another" at col. 2, lines 15-19 by defining unique attributes for storing data on a specific class of entity and at col. 3, lines 39-41 where classification item and attribute relationship is stored in file;

"one or more application programs which can use access means to access the data classification structure and which have a program-internal data representation structure with classification elements, said classification elements incorporating or being able to incorporate resources" at col. 2, lines 21-34 by implementing a classification system for group technology applications where classification structures are in the form of

hierarchies based on root attributes such that searches can be performed on any level and a detailed item parameter values and relationship between items and classification attributes are stored; and

"where the data representation structure of an application program has been synchronized with the data classification structure or can be synchronized with the data classification structure by the application program" at col. 2, lines 21-34 and col. 4, lines 5-8 where a detailed item parameter values and relationship between items and classification attributes are established and stored.

As per claim 2, Maki teaches the data organization system characterized in that "the access means have a functionality which is built into each of the application programs" at col. 4, lines 17-22 where an interactive application system uses a built in direct on-line access query function to access the data item and classification structure attributes.

As per claim 3, Maki teaches the data organization system characterized in that "the access means have an operating system component which can access the data classification structure and has a function interface, and the functionality built into the application programs is function calls to the function interface" at col. 4, lines 17-22 where an interactive application system uses a built in direct on-line access query function, the function interface of the classification system, to access the data item and classification structure attributes.

As per claim 7, Maki teaches data organization system characterized in that the "relationship between the classification elements comprises their sequence and their hierarchical arrangement" at Fig. 2 and col. 3, lines 48-68 where classification attributes



are stored in a relational database table with hierarchical data structure levels are provided and the sequencing of table columns is implied.

As per claim 8, Maki teaches data organization system characterized in that "the data classification structure is a file which contains a structured list containing entries showing the classification elements and their relationship with one another, where the relationship is shown by an arrangement of the classification elements within the file" at col. 2, lines 20-34 where classification structures in the form of hierarchies based on root attributes are stored in a classification attribute file. Searches can be performed at any level in these hierarchical structures. Detailed item parameter values and the relationship between items and classification attributes are stored in a separate file. A classification parameter template file is used to define variable column headings for different classification attributes.

As per claim 11, Maki teaches the following:

"application programs which relate to the interrogation and/or manipulation of the data classification structure" at col. 2, lines 31-41, by describing an attribute-based item classification system for classification query and retrieval, and further, at col. 2, lines 15-19 by defining unique attributes for storing data on a specific class of entity and at col. 3, lines 39-41 where classification item and attribute relationship is stored in file;

"reading and/or manipulating the classification elements contained in the data classification structure and their relationship" at col. 2, lines 21-34 by implementing a classification system for group technology applications where classification structures are in the form of hierarchies based on root attributes such that searches can be

performed on any level and a detailed item parameter values and relationship between items and classification attributes are stored; and  
“transferring data classification structure data which have been read to the interrogating application program” at col. 2, lines 21-34 and col. 4, lines 5-8 where a detailed item parameter values and relationship between items and classification attributes are established and stored.

As per claim 12, Maki teaches the data organization system characterized in that “at least one of the application programs has functions for creating and manipulating the classification elements of the data classification structure and their relationships with one another” at Fig. 3 and col. 4, lines 1-8 where user specifically inputs item classification to a relational database table for creating the classification structure and establishing the relationship among the items.

As per claim 13, Maki teaches the data organization system characterized in that “a special program has functions for managing the data classification structure” at col. 4, lines 36-53 where the SQL is implemented to manage the classification structure.

As per claim 14, Maki teaches the data organization system characterized in that “it is a computer program product whose constituents are at least in part able to be loaded directly into the main memory of a digital data processing installation and whose program constituents can be executed by the data processing installation” at col. 4, lines 36-53 where the SQL is a computer program product implemented to load data into memory by querying database table and the program is executed by processing installation.

As per claim 15, Maki teaches the following:

"an application program reads a data classification structure for describing a classification system with user-definable classification elements which have a user-definable relationship with one another" at col. 4, lines 44-53 where pre3-compiled query program call is utilized to provide an enhanced data retrieval capability for reading business entity attributes, the classification structures;

"a program-internal data representation structure with classification elements incorporating or able to incorporate resources is read" at col. 2, lines 21-34 by implementing a classification system for group technology applications where classification structures are in the form of hierarchies based on root attributes such that searches can be performed on any level and a detailed item parameter values and relationship between items and classification attributes are stored; and

"differences are established between the data classification structure and the program-internal data representation structure" and "the data classification structure and the program-internal data representation structure are synchronized in terms of their respective classification elements and their relationship with one another" at col. 2, lines 21-34 and col. 4, lines 5-8 where a detailed item parameter values and relationship between items and classification attributes are established and stored.

As per claim 16, Maki teaches that "the synchronization is alignment of the program-internal data representation structure with the data classification structure" at col. 2, lines 21-34 and col. 4, lines 5-8 where a detailed item parameter values and relationship between items and classification attributes are established and stored.

As per claim 17, Maki teaches that "the synchronization is alignment of the data classification structure with the program-internal data representation structure" at col. 2, lines 21-34 and col. 4, lines 5-8 where a detailed item parameter values and relationship between items and classification attributes are established and stored.

As per claim 18, Maki teaches that "the user-definable data classification structure is created" at col. 2, lines 21-34 and col. 4, lines 5-8 where a detailed item parameter values and relationship between items and classification attributes are established and stored.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-10 are rejected are rejected under U.S.C. 103(a) as being unpatentable over Maki et al. (U.S. Patent 5,201,047, hereafter "Maki"), as applied to claims 1-3 and 7-8, and further in view of Charisius et al. (U.S. Publication 2002/0108101, hereafter "Charisius").

As per claim 9, Maki does not teach he data organization system characterized in that "the file is an XML file".

However, Charisius teaches visually depicting an existing data definition file containing data elements and relationship between the elements by generating a an XML structure diagram file at the Abstract.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Charisius' reference with Maki's by providing XM structure for the items and classification attributes files because by doing so the users of Maki' system would have been able to quickly change or correct the hierarchical structured attributes, further the XML files would also have been helpful for application development.

As per claim 10, Charisius further teaches data organization system characterized in that the "resources in the data representation structure can be objects in file systems, objects in files, data records in databases and objects in computer networks" at Page 4, [0060] where resources in the data representation structure can be objects in file systems, and further at Fig. 1, Pages 1-2, [0018] and Page 4, [0063] where database or depository on a network system is utilized.

7. Claims 4-6 are rejected are rejected under U.S.C. 103(a) as being unpatentable over Maki et al. (U.S. Patent 5,201,047, hereafter "Maki"), as applied to claims 1-3, and further in view of Jayasimha et al. (U.S. Patent 6,564,377, hereafter "Jayasimha").

As per claim 4, Maki teaches data organization system having data classification structure as previously described in claims 1-3 rejection.

The Maki reference does not specifically teach "operating system component is a dynamic link library with an application programming interface", although Maki teaches "the function calls are calls to the application programming interface" at col. 4, lines 17-22 where an interactive application system uses a built in direct on-line access query

function, the function interface of the classification system, to access the data item and classification structure attributes.

However, Jayasimha teaches component software module which can be used and updated easily as in-process dynamic link library and the link library is installed into the software component module for execution within the application at col. 4, lines 23-36.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Jayasimha's reference with Maki's by providing system registration information directly from the component object such that an additional layer of software structure would have been eliminated. The combination of references would have been able to help developer to avoid the need to understand the organization and structure of the system registry in order to be able to correctly modify it without affecting the operation of other objects already installed within the system registry.

As per claim 5, Jayasimha further teaches the data organization system "characterized in that the operating system component is a program, and the function calls are program calls with parameter transfers" at cols. 13-14 lines 1-67 where program modules are the operating system components whose call are functions call as shown with input/output parameters.

As per claim 6, Jayasimha further teaches data organization system "characterized in that the program is a database system, and the data classification structure is managed by the database system" at col. 2, lines 17-32 where a registration data store stores a data structure which defines a self-describing component module.

**Conclusions**

8. The prior art made of record
- A. U.S. Patent No. 5,201,047
  - B. U.S. Patent No. 6,564,377
  - C. U.S. Publication 2002/0108101

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- D. U.S. Publication 2002/0087550
- E. U.S. Publication 2003/0055836
- F. U.S. Patent No. 6,735,583

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is 703-305-4894.

The examiner can normally be reached on 8 AM to 5 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

**Conclusions**

8. The prior art made of record
- A. U.S. Patent No. 5,201,047
  - B. U.S. Patent No. 6,564,377
  - C. U.S. Publication 2002/0108101

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- D. U.S. Publication 2002/0087550
- E. U.S. Publication 2003/0055836
- F. U.S. Patent No. 6,735,583

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is 703-305-4894.

The examiner can normally be reached on 8 AM to 5 PM, Monday through Friday.

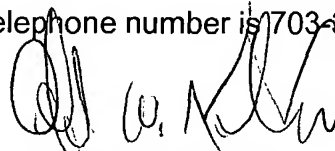
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Kuen S. Lu

Patent Examiner

July 10, 2004



Alford W. Kindred

Primary Examiner

July 10, 2004